S/M No. : FR11000011

Refrigerator

Service Manual

MODEL : FR - 110

(Revision Edition)

DAEWOO ELECTRONICS CO., LTD.

http : //svc.dwe.co.kr

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SAFETY AND PRECAUTIONS

1) For starters, be sure to check any chances of the leakage of electricity
2) You could handle a part in the vicinity of electricity after unplugging
3) You should put on rubber glovers to prevent an electric shock on operation test
4) Make sure the rated current, voltage, capacity before using an instrument
5) Keep your wet hands away from the metal goods in the freezer compartment not to be frostbitten
6) Be careful not to let water to permeate the electric part in the machine room
7) with the door open during your working, you might be damaged by that door
8) You should give a tilt to the refrigerator for your safe after removing the breakable goods inside the refrigerator
9) You'd better use cotton golves if you fix it up around the evaporator

TABLE OF CONTENTS

1. SPECIFICATION 1

2. External Views 2

3. Wire Diagram 3

4. Name of Parts 4

5. Refrigerant Cycle 5

6. Machine Room View and Parts 6

7. Main Components 7

8. Cabinet and Door Color Specification 8

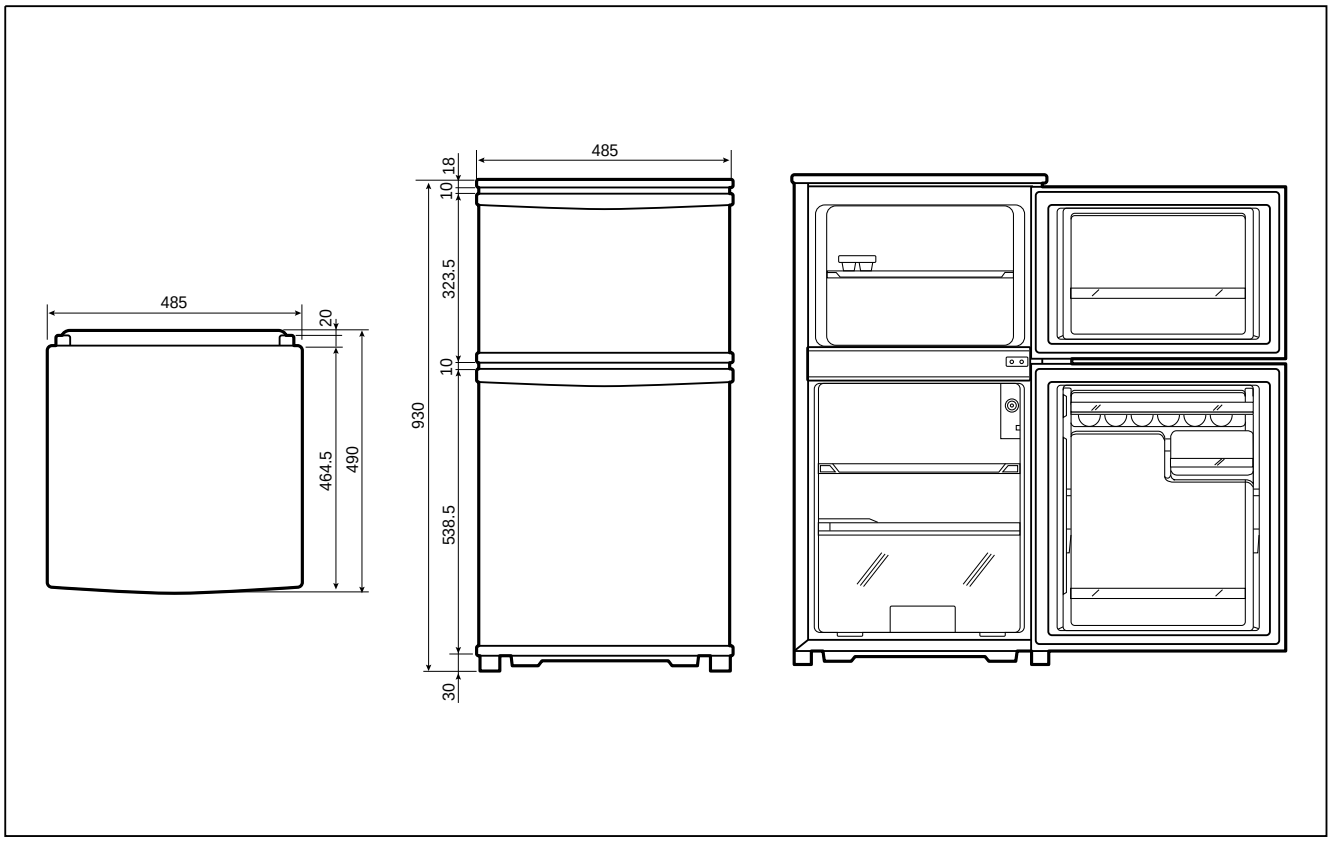
9. Exploded Views and Parts List 9

1.SPECIFICATION

1. FR-110

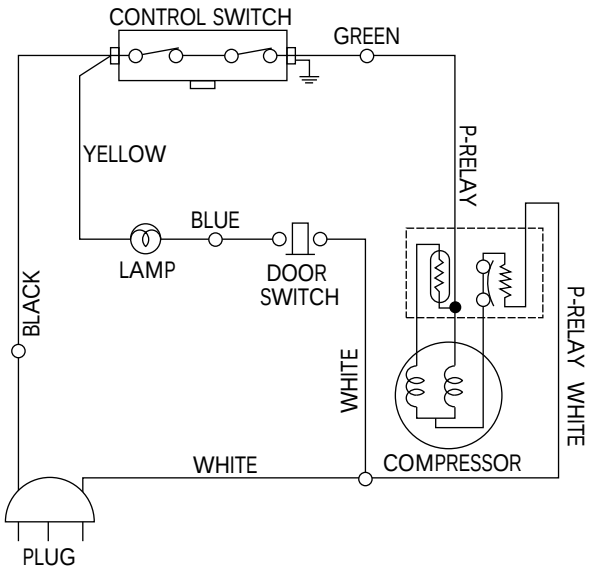
Model Name		FR-110
Refrigerant	R12	100g
	R134a	90g
Cooling System		Aluminum embossed plate "Roll Bond" type
Refrigeration System		Natural Cold-air Convection
Defrost System		Natural
Defrost Operation		Manual Start & Stop
Cold Control		Adjustable Dial
Capacity	Freezer	30L
	Refrigerator	52L
	Total	82L
External Dimension	Height	930 mm
	Width	485 mm
	Depth	490 mm
Net Weight		29 Kg

2.External Views

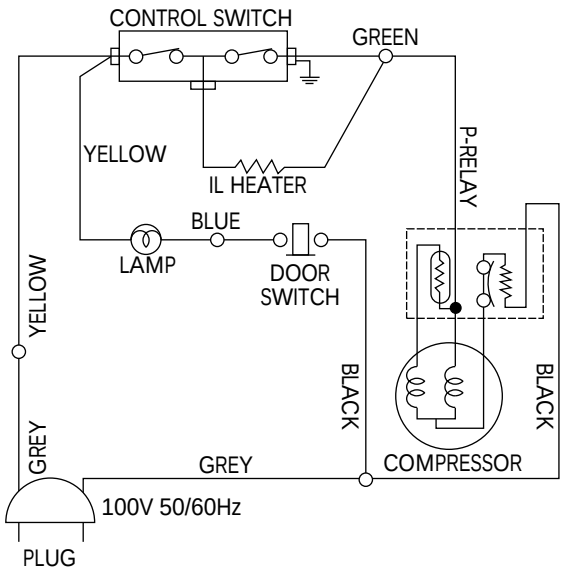


3. Wire Diagram

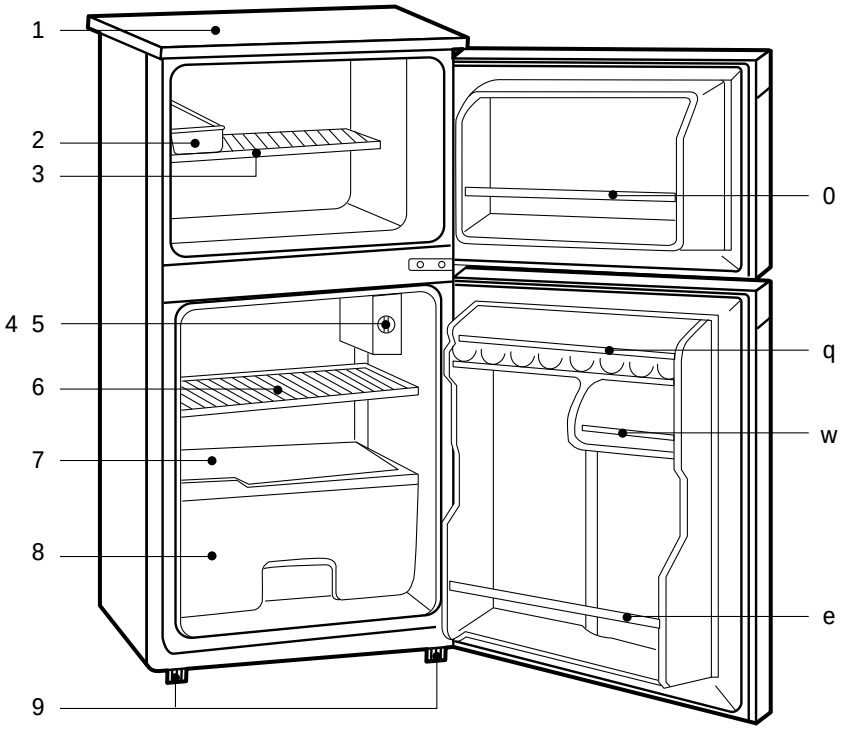
1) For other country



2) Only for JAPAN

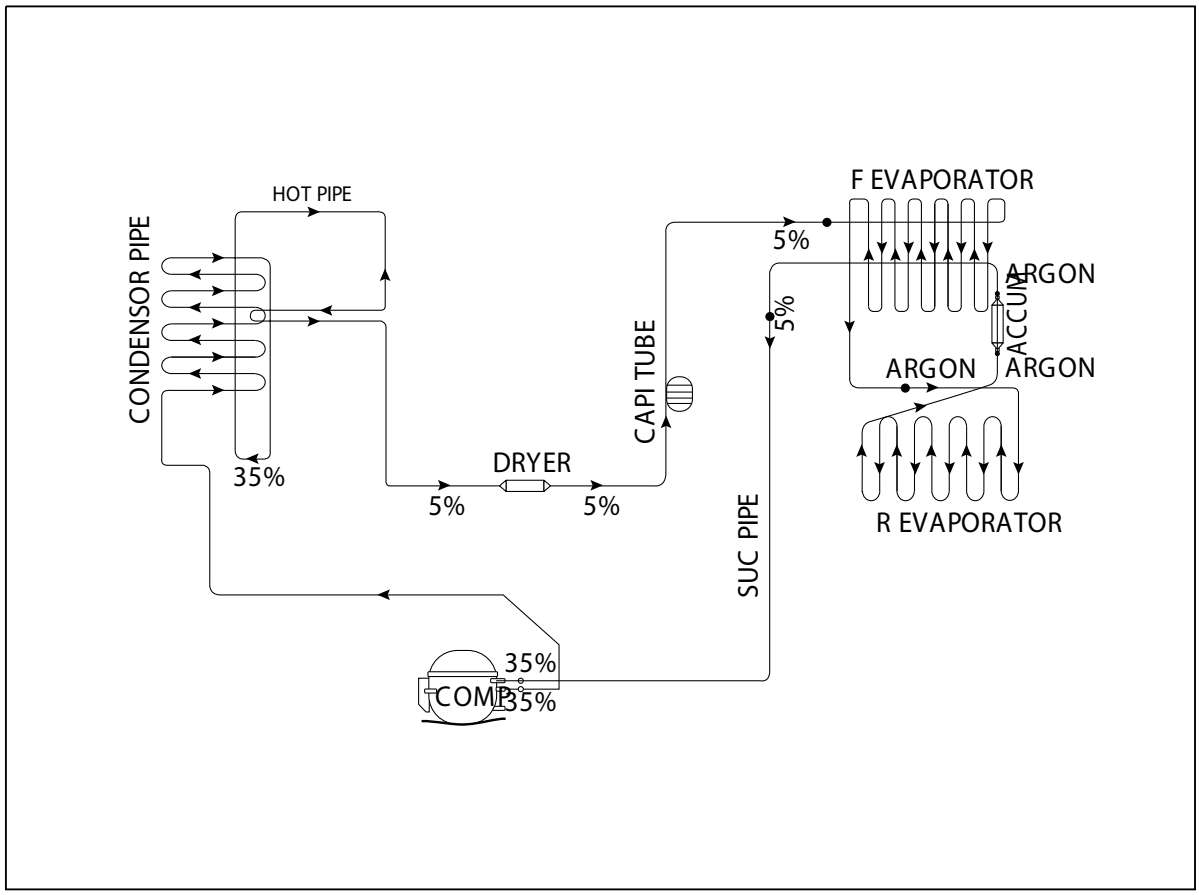


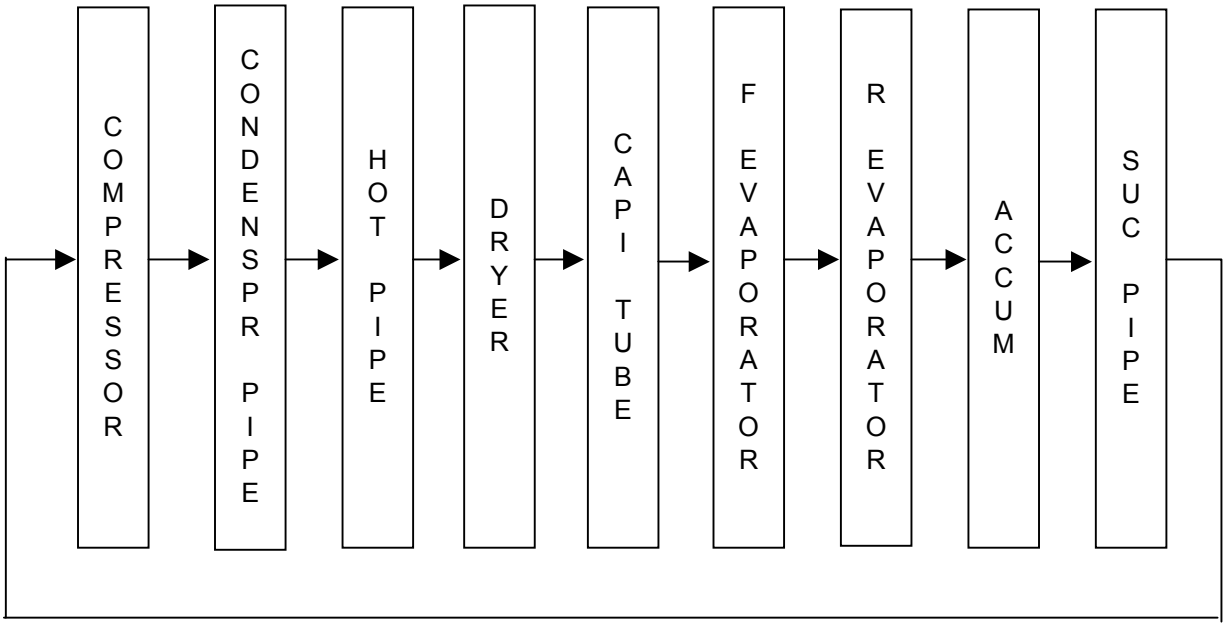
4.Name of Parts



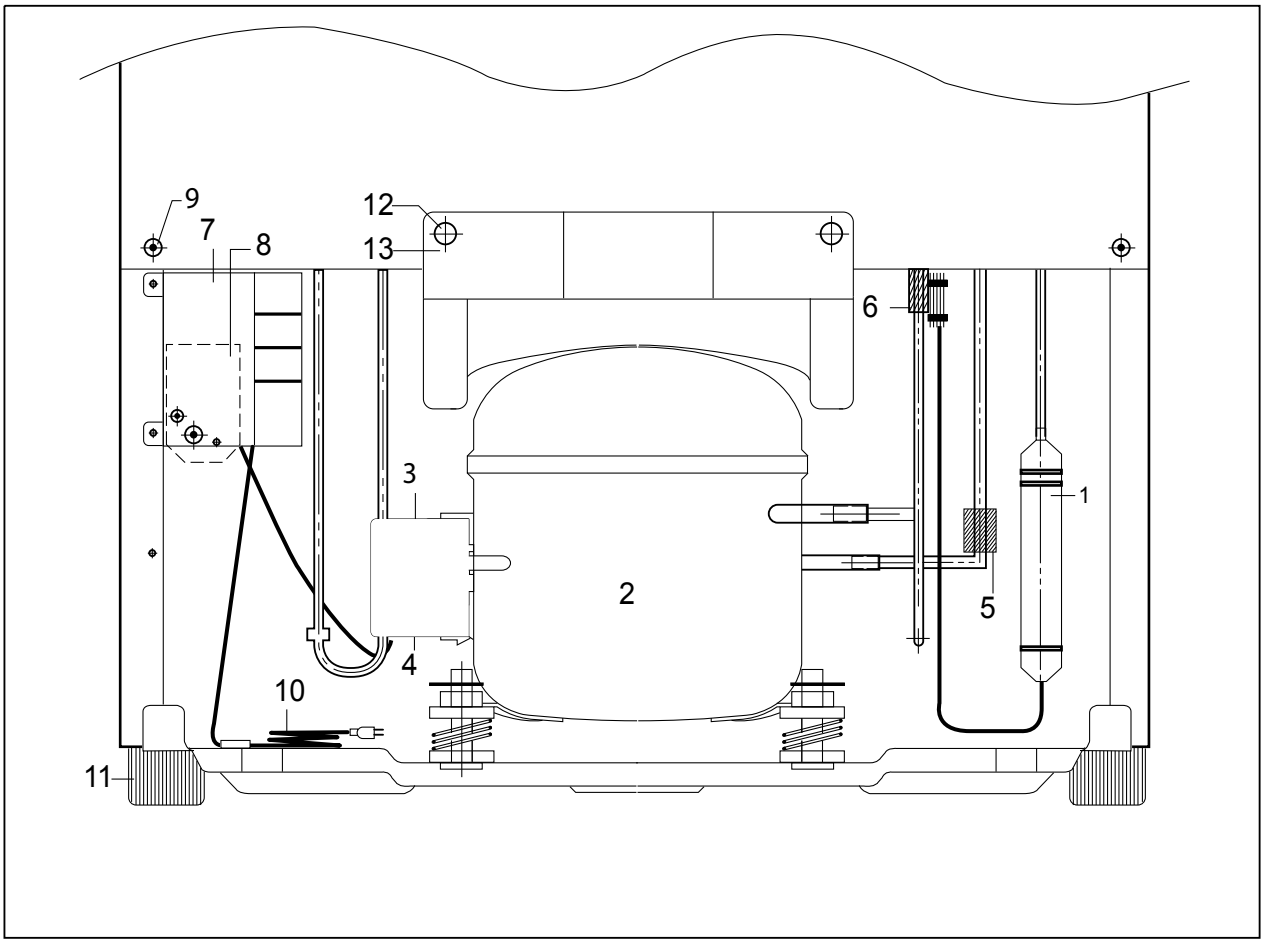
1 Panel Table
2 Case Icing
3 Freezer Shelf
4 Box Control
5 Knob Control
6 Shelf
7 Cover Vegetable Case
8 Case Vegetable
9 Adjustable Foot
0 Pocket Bar (A)
q Pocket Bar (B)
w Pocket Bar (D)
e Pocket Bar (C)

5.Refrigerant Cycle





6.Machine Room View and Parts



NO	PART NAME	NO	PART NAME	NO	PART NAME
1	DRYER AS	6	VIBRATIONPROOF GUM	10	CORD POWER
2	COMPRESSOR	7	BOX POWER	11	FOOT ADJ
3	PIPE SERVICE	8	CEC COVER	12	FIXTURE VAPORI
4	SWITCH P-RELAY AS	9	SCREW TAPPING	13	CASE VAPORI
5	VIBRATIONPROOF MASS (A)				

7.Main Components

1. COMPRESSOR

Refrigerant	R12							
Voltage	**100V/50,60Hz**	**110V/60Hz**	**115, 120V/60Hz**	**127V/60Hz**	**220V/50Hz**	**220V/60Hz**	**230V/50Hz**	**240V/50Hz**
Comp. model	FL17J	FL15J-3	FL15J-1	X	SL17J-5	X	X	SL17J-5
Part code	3951117300	3951115330	3951115310	X	3954117380	X	X	3954117380
Strating type	RSIR	RSIR	RSIR	X	RSIR	X	X	RSIR

Refrigerant	R134a							
Voltage	**100V/50,60Hz**	**110V/60Hz**	**115, 120V/60Hz**	**127V/60Hz**	**220V/50Hz**	**220V/60Hz**	**230V/50Hz**	**240V/50Hz**
Comp. model	HEL15J	HEL13J-3H	HEL15J-1	X	HSL19J-5	X	X	HSL19J-5
Part code	3953115E00	3953113E3H	3953115E10	X	3954119E50	X	X	3954119E50
Strating type	RSCR	RSCR	RSCR	X	RSIR	X	X	RSIR

2. RELAY ASSEMBLY

Refrigerant	R12							
Voltage	**100V/50,60Hz**	**110V/60Hz**	**115, 120V/60Hz**	**127V/60Hz**	**220V/50Hz**	**220V/60Hz**	**230V/50Hz**	**240V/50Hz**
Relay model	302UHBYY-52	<--	<--	X	174SHBYY-52	X	X	174SHBYY-52
Part code	3817904800	<--	<--	X		X	X	

Refrigerant	R134a							
Voltage	**100V/50,60Hz**	**110V/60Hz**	**115, 120V/60Hz**	**127V/60Hz**	**220V/50Hz**	**220V/60Hz**	**230V/50Hz**	**240V/50Hz**
Relay model	302UHBYY-52	213THBYY-52	232THBYY-52	X	213THBYY-52	X	X	213THBYY-52
Part code	3817904800	3817900400	3817904700	X	3817900400	X	X	3817900400

3. RUNNING CAPACITOR

Refrigerant	R12							
Voltage	**100V/50,60Hz**	**110V/60Hz**	**115, 120V/60Hz**	**127V/60Hz**	**220V/50Hz**	**220V/60Hz**	**230V/50Hz**	**240V/50Hz**
Spec.	X	X	X	X	X	X	X	X
Part code	X	X	X	X	X	X	X	X

Refrigerant	R134a							
Voltage	**100V/50,60Hz**	**110V/60Hz**	**115, 120V/60Hz**	**127V/60Hz**	**220V/50Hz**	**220V/60Hz**	**230V/50Hz**	**240V/50Hz**
Spec.	250V/16μF	230V/10μF	230V/10μF	X	X	X	X	X
Part code	3816801900	400EL15130	400EL15130	X	X	X	X	X

4. CONTROL SWITCH

Refrigerant	R12, R134a							
Voltage	**100V/50,60Hz**	**110V/60Hz**	**115, 120V/60Hz**	**127V/60Hz**	**220V/50Hz**	**220V/60Hz**	**230V/50Hz**	**240V/50Hz**
Spec.	K-11-DA-1	K-11-DD	<--	X	K-11-DB	X	X	K-11-DB
Part code	3018116700	3018110400	<--	X	3018300200	X	X	3018300200

5. DRYER

Refrigerant	R12	R134a
Spec.	5 g	10 g
Part code	4019L04000	3016801300

8.Cabinet and Door Color Specification

1. ASSEMBLY URETHAN FREEZER DOOR

1) Key type

Refrigerant	R12				R134a			
Color type	Dull lamina sheet	High glossy lamina sheet	Normal PCM	High glossy bright PCM	Dull lamina sheet	High glossy lamina sheet	Normal PCM	High glossy bright PCM
Part code	X	PFDT1UB280	PFDT1UB010	X	X	X	X	X

2) Non key type

Refrigerant	R12				R134a			
Color type	Dull lamina sheet	High glossy lamina sheet	Normal PCM	High glossy bright PCM	Dull lamina sheet	High glossy lamina sheet	Normal PCM	High glossy bright PCM
Part code	X	PFDT1UB280	PFDT1UB010	X	X	PFDT1UB110	PFDT1UB020	X

2. ASSEMBLY URETHAN REFRIGERATOR DOOR

1) Key type

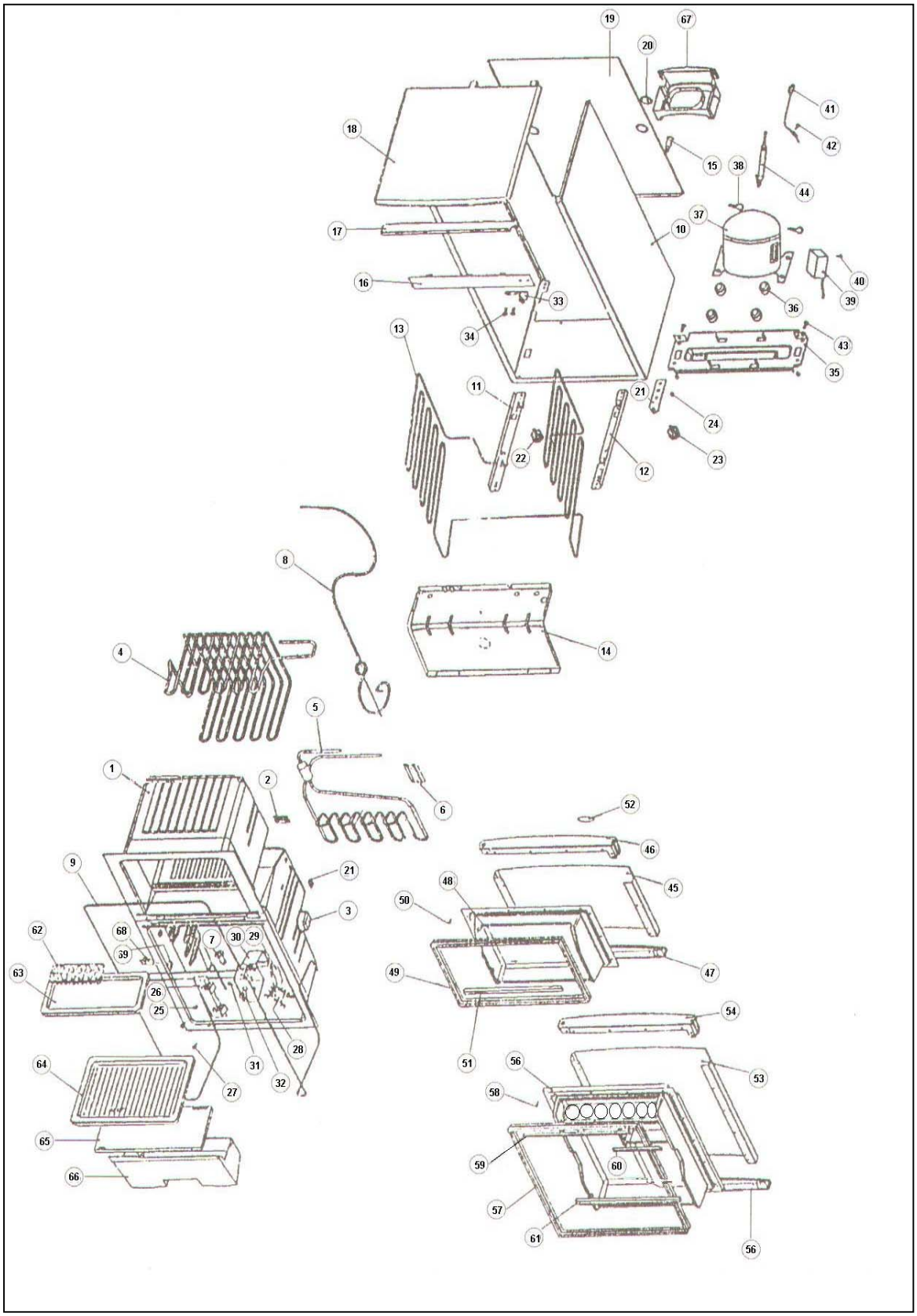
Refrigerant	R12				R134a			
Color type	Dull lamina sheet	High glossy lamina sheet	Normal PCM	High glossy bright PCM	Dull lamina sheet	High glossy lamina sheet	Normal PCM	High glossy bright PCM
Part code	X	PFDU2UB190	PFDU2UB260	X	X	X	X	X

2) Non key type

Refrigerant	R12				R134a			
Color type	Dull lamina sheet	High glossy lamina sheet	Normal PCM	High glossy bright PCM	Dull lamina sheet	High glossy lamina sheet	Normal PCM	High glossy bright PCM
Part code	X	PFDU2UB280	PFDU2UB220	X	X	PFDU2UB285	PFDU2UB225	X

9.Exploded Views and Parts List

1.Exploded View



2) Parts list

NO	PART CODE	PART NAME	DESCRIPTION	QUANTITY	REMARK
1	3017404901	LINER	ABS T3.0	1	
2	3010603610	BRACKET *M HINGE	SPC-T2.5	1	
3	3017000900	EVA F PIPE AS	AL ¯8.0	1	
4	3017001000	EVA R PIPE AS	AL ¯8.0	1	
5	3010604010	BRACKET SENSOR	AL T2.0	1	
6	3013201200	HOSE DRAIN	SI	1	
7	3014401707	PIPE SUC AS	DCUT1-0 ¯6.0	1	
8	3014401802	PIPE HOT	DCUT1-1/2H ¯4.0	1	
9	3010801000	CABINET	PCM T0.5	1	
10	3017603800	REINFORCE *L	SBHG T1.0	1	
11	3017603900	REINFORCE *R	SBHG T1.0	1	
12	3014401900	PIPE CON	FLTT ¯4.76	1	
13	3010301600	BASE CAB	SBHG T0.4	1	
14	4018R30323	FIXTURE BOILD	PE-HD	2	
15	3014506700	PLATE DIVISION	SCP-1 T0.5	1	
16	3010603520	BRACKET TABLE PANEL	SCP-1 T0.5	1	
17	3014201800	PANEL TABLE	PP	1	
18	3011420210	COVER CAB	PCM T0.4	1	
19	4009A32010	CAP URT HL BG	PE-HD	2	
20	3012902500	HINGE *U	SPC-1 T2.4	1	
21	3012100800	FOOT ADJ *L AS	PP+BOLT H=30	1	
22	3012101000	FOOT ADJ *R AS	PP+BOLT H=27	1	
23	3010700600	BUSHING SENSOR	SI	2	
24	3011420500	COVER SENSOR	PP	2	
25	7112401608	SCREW TAPPING	T1 TRS SUC 4X16	2	
26	3018116700	THERMOSTAT	DA-1	1	
27	3012703131	SOCKET LAMP AS		1	
28	4018R72117	BOX CONTROL	HIPS	1	
29	7112401211	SCREW TAPPING	T1 TRS MFZN 4X12	1	
30	3013400600	KNOB CONTROL	ABS	1	
31	3012903800	HINGE *M	SPC-1 T3.0	1	
32	3010600203	SCREW SPECIAL	MF-ZN5-A2 M5X16	2	
33	3010302602	BASE COMP	SBHG T1.0	1	
34	4001E09013	ABSORBER COMP	NR-A	4	
35	**3954119E50**	COMPERSSOR	**HSL 19J-5 220/240V-50Hz**	1	
36	3015100500	SPRING FIXTURE	¯1.6	4	
37	**3018102771**	SWITCH P-RELAY AS	**BK,RD(HCFC CB,CE)**	1	
38	3816100110	RELAY BAND	SK-5 0.7T ZN-3-A	1	
39	**4017J17101**	CORD POWER	**For EXPORT,BK,GN,WH**	1	

NO	PART CODE	PART NAME	DESCRIPTION	QUANTITY	REMARK
40	7112401211	SCREW TAPPING	T1 TRS MFZN 4X12	1	
41	7650602011	BOLT HEX	6B-1 MFZN 6X20	4	
42	**3016801423**	DRYER AS	**10G(085 HCFC)**	1	
43	**3011707200**	DOOR F	**PCM T0.5**	1	
44	3010906101	CAP F DOOR *T	ABS	1	
45	3010906201	CAP F DOOR *U	ABS	1	
46	3017405000	LINER F DOOR	ABS T1.5	1	
47	3012302800	GASKET F DOOR AS	PVC-S+MAGNET	1	
48	7112401211	SCREW TAPPING	T1 TRS MFZN 4X12	14	
49	3019004700	POCKET BAR A	PVC-H	1	
50	3013572510	LABEL EMBLEM	URT FORM	1	
51	**3011707300**	DOOR R	PCM T0.5	1	
52	3010905901	CAP R DOOR *T	ABS	1	
53	3010906001	CAP R DOOR *U	ABS	1	
54	3017405100	LINER R DOOR	ABS T1.5	1	
55	3012302900	GASKET R DOOR AS	PVC-S+MAGNET	1	
56	7112401211	SCREW TAPPING	T1 TRS MFZN 4X12	18	
57	3019004800	POCKET BAR B	PVC-H	1	
58	3019004900	POCKET BAR C	PVC-H	1	
59	3019005000	POCKET BAR D	PVC-H	1	
60	4002A30420	CASE ICING	PE-HD	1	
61	3017804900	SHELF F	GPPS	1	
62	3017805000	SHELF R	GPPS	1	
63	3011420300	COVER VEGTB CASE	GPPS	1	
64	3011108300	CASE VEGTB	GPPS	1	
65	3011108400	CASE VAPORI	PP	1	
66	401GG16002	SWITCH DOOR AS	AC 300V/1A	1	
67	3015002000	SPACER DOOR SWITCH	PVC T1.0	1	